

REMARKS/ARGUMENTS

Claims 1-3, 5 and 7-22 are present in this application. By this Amendment, claims 1, 3, 5, 14 and 17 have been amended, and claims 4 and 6 have been canceled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

With reference to the Office Action, in paragraph 2, claims 1, 2, 14 and 17-22 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,189,286 to Seible in view of U.S. Patent No. 5,580,480 to Chatelain. This rejection is respectfully traversed.

With regard to claims 1, 14 and 17, the Office Action maintains its misplaced contention that the structural characteristics embodying a material's Poisson's ratio defines "a recitation of desired result." As discussed previously, however, this understanding contrasts well-known principles of mechanical engineering. Assuming perhaps that the Office Action was referring to the recitation concerning confinement of the solid material, such recitation has been deleted from claims 1, 14 and 17. Since Seible and Chatelain are silent with regard to a Poisson's ratio relationship of a tubular housing and a solid material, respectively, Applicant respectfully submits that the rejection is misplaced.

Claim 21 defines a construction beam including a tubular housing filled with a solid material and at least one prestressed reinforcing rod embedded in the solid material, the tubular housing forming part of the construction beam. Neither Seible nor Chatelain discloses or remotely suggests structure including a prestressed reinforcing rod embedded

in a solid material within a tubular housing. The Examiner in fact appears to recognize this deficiency in the Seible and Chatelain patents in paragraph 4 of the Office Action. In a similar context, claim 22 defines the steps of securing at least one reinforcing rod in a tubular housing, placing the at least one reinforcing rod under tension, and filling the tubular housing with a solid material such that the solid material surrounds the at least one reinforcing rod. Since neither reference discloses or remotely suggests the inclusion of a reinforcing rod under tension, Applicant respectfully submits that the rejection of claims 21 and 22 is also misplaced.

With regard to the dependent claims, Applicant submits that these claims are allowable at least by virtue of their dependency on an allowable independent claim. Moreover, dependent claim 19 recites that the securing step comprises placing the at least one reinforcing rod under tension prior to filling the tubular housing with the solid material such that the reinforcing rod is prestressed in the tubular housing. For reasons similar to those discussed above, Applicant submits that this rejection is also misplaced.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 17-20 and 22 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 5,675,956 to Nevin. This rejection is respectfully traversed.

With regard to claim 17, the Office Action recognizes that Nevin lacks any teaching or suggestion of the claimed Poisson's ratio and the relationship between that of the tubular housing and the solid material. For at least this reason, Applicant submits that the rejection is misplaced.

With regard to claim 22, as noted above, claim 22 defines the steps of securing at least one reinforcing rod in a tubular housing, and placing the at least one reinforcing rod under tension. The Office Action references metal threaded rod (or shaft) 50 in the Nevin patent and contends that this rod is a "reinforcing rod." To the contrary, however, the rod 50 in the Nevin patent merely serves to connect two pole segments together. Even assuming the rod 50 performs some reinforcing function, which Applicant does not concede, Nevin lacks even a remote suggestion that this rod is placed under tension within a tubular housing, after which the tubular housing is filled with a solid material. For this reason also, Applicant submits that the rejection of claim 22 is misplaced.

With regard to dependent claims 18-20, Applicant submits that these claims are allowable at least by virtue of their dependency on an allowable independent claim.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 3, 4 and 16 were rejected under 35 U.S.C. §103(a) over Seible in view of Chatelain, U.S. Patent No. 5,509,759 to Keesling and U.S. Patent No. 5,960,597 to Schwager. This rejection is respectfully traversed.

The Office Action recognizes that neither Seible nor Chatelain discloses a reinforcing rod that is stressed using either a pretension method or a post-tension method in the tubular housing. In this context, however, the Office Action contends that "Keesling teaches pre-stressed cables 14, and Schwager teaches method for post-tensioning cables 122 for concrete column 110 [sic]." Applicant respectfully submits, however, that this rejection is a product of hindsight in view of Applicant's own

disclosure. Even assuming that the Chatelain patent provides a suggestion to incorporate a reinforcing rod in the Seible beam, which Applicant does not concede, neither Keesling nor Schwager even remotely suggests the manner in which pre- and post-tension methods would have been obvious. As discussed in the Request for Reconsideration filed July 14, 2003, Chatelain describes that its reinforcing bars 48 are inserted after pouring the concrete. See column 3, lines 21-24. In fact, since Chatelain is pouring its concrete as fence posts, it would be practically impossible to incorporate a pre-stressed reinforcing rod. Moreover, with regard to the Schwager patent, Schwager describes a method for post-tensioning columns, wherein concrete columns are wound with an external cable to increase column performance for earthquake forces and the like. As discussed previously, this post-tensioning is not even remotely similar.

Still further, Applicant submits that claims 3 and 4 are allowable at least by virtue of their dependency on an allowable independent claim. That is, neither Keesling nor Schwager correct the deficiencies noted above with respect to Seible and Chatelain with regard to independent claim 1. For this reason also, Applicant submits that the rejection is misplaced.

With regard to claim 16, although claim 16 is rejected in paragraph 4 of the Office Action, claims 15 and 16 are indicated as containing allowable subject matter in paragraph 5 of the Office Action. Indeed, since claim 16 depends from claim 15, which has not been treated inconsistently in the Office Action but has rather been indicated as

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containing allowable subject matter, Applicant submits that for this reason also, the rejection is misplaced.

Reconsideration and withdrawal of the rejection are respectfully requested.

Applicant acknowledges with appreciation the indication of allowable subject matter in claims 15 and 16. Applicant further acknowledges that claims 5-13 have not been rejected over prior art. By this Amendment, claim 5 has been rewritten in independent form and includes the subject matter of claim 6.

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims are patentable over the art of record and that the application is in condition for allowance. Should the Examiner believe that anything further is desirable in order to place the application in condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Prompt passage to issuance is earnestly solicited.

Respectfully submitted,

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